

## **NIEHS volunteers support science day camp**

*By Richard Sporne*

The Durham (N.C.) Alumnae Chapter of Delta Sigma Theta Sorority held its eighth annual Science and Everyday Experiences (SEE) summer camp June 22, attracting more than 40 students, grades 4-9, from Durham area schools.

Regional volunteers, including staff from NIEHS, provided a stimulating experience for children and their parents, built around the theme "Preparing for STEM Careers in a Global Society." Important funding came from the Durham Alumnae Chapter and PNC Bank.

A host of Delta's dedicated volunteers led hands-on science activities for the students, carrying on the sorority's century-long tradition of service to the community and its young people. In large part because of its community outreach efforts, the Durham Alumnae Chapter was honored as the 2013 South Atlantic Region Chapter of the Year.

### **Getting off to a fun and healthy start**

The day began with a health and fitness warm-up led by NIEHS volunteer Shawn Jeter. The lively workout was similar to a Zumba class, with rhythmic music playing, as the children danced and exercised in unison outside the building. Smiles prevailed while laughter filled the air.

After a welcome from event chair Sharon Beard of NIEHS, the 43 children rotated through three scientific experiment modules. These hands-on exercises offered the students a broad and stimulating experience, by tapping into contemporary topics. As NIEHS volunteer Joan Packenham, Ph.D., said, "The experiments were designed to expose students to successful scientists and also excite the students about science."

One group enthusiastically extracted DNA from strawberries, during an exercise led by biomedical engineer Matthew McCullough, Ph.D., of North Carolina A&T State University.

A second group performed a computer exercise, "Get With Programming," where each child wrote simple computer code on a laptop computer. Computer engineer Corey Graves, Ph.D., and industrial engineer Lauren Davis, Ph.D., of N.C. A&T led the session.

The third group, led by Nyote Calixte of the Durham Alumnae Chapter, was called "I Feel Good" and dealt in part with the importance of iron in our diet. Children separated iron from various foods, including fortified cereals, and studied mock samples of saliva, with assistance from NIEHS postdoctoral fellows Danielle Watt, Ph.D., and Georgette Charles, Ph.D.

### **Involving parents**

Twelve parents attended their own session, moderated by Packenham and former NIEHS director of Education and Biomedical Research Development Marian Johnson-Thompson, Ph.D. Now an adjunct professor at the University of North Carolina at Chapel Hill (UNC), Johnson-Thompson also served as a featured presenter. She explained the importance of science and math for children, no matter what path they may take in life, and urged parents to foster their children's well-being. "Do all you can in support and maintenance of your children's physical and mental health, through healthy diet and lifestyle practices."

"Make time for your children," Johnson-Thompson also said. "Encourage them to participate in social activities, community service projects, and demonstrate to them the importance of giving their best in all academic pursuits, and sports activities, too." She concluded with reference to her NIEHS years, speaking of protecting children from the broad range of environmental challenges we all face, including noise, chemical pollutants and toxins, allergens, and biological hazards.

The SEE program has positively touched more than 350 students and 100 parents, through its camps, and will continue making positive efforts to encourage and stimulate children in science, engineering, and math.

Contact Sharon Beard for information regarding future programs at [sbeard28@nc.rr.com](mailto:sbeard28@nc.rr.com).



*Johnson-Thompson, standing, offered parents tips for enriching the home environment. (Photo courtesy of Willis Page and Arvis Epps)*



*Students began their morning with a health and fitness warm-up. (Photo courtesy of Willis Page and Arvis Epps)*

(Richard Sloane is an employee services specialist with the NIEHS Office of Management.)



*Campers obviously enjoyed the hands-on exercise of extracting DNA from strawberries. (Photo courtesy of Willis Page and Arvis Epps)*



*Calixte, center, worked with students, as they tested for iron in the "I Feel Good" exercise. (Photo courtesy of Willis Page and Arvis Epps)*



*Charles, left, and Watt, standing center, were also leaders in the "I Feel Good" exercise. (Photo courtesy of Willis Page and Arvis Epps)*



*Graves gave students preliminary instructions for the "Get With Programming" exercise. (Photo courtesy of Willis Page and Arvis Epps)*



*Volunteers, shown in the back row, and campers came together at the end of another successful SEE experience. Several of the participants are in their second year at the camp. (Photo courtesy of Willis Page and Arvis Epps)*

### **A broad range of community support**

Other speakers included Kendra Tucker from the Burroughs Wellcome Fund, Gloria Woods-Weeks from the J.D. Clement Early College High School at North Carolina Central University, and Joan Barber, Ph.D., and Carol Stern from the North Carolina School of Science and Mathematics. All shared details regarding their respective programs, each designed to give promising young science, engineering, and math students a jump in preparing for their futures.

Unfortunately, Jacqueline Ellis, Ph.D., who was prominently featured on the agenda, was unable to attend. Ellis received her Ph.D. in molecular genetics from UNC in May 2013. She was a student who had participated in programs described at the workshop. Ellis clearly serves as a model for what can be accomplished when students have access to these kinds of enrichment activities.

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